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Lesson Plan: Bug Basics

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Lesson Plan: Bug Basics

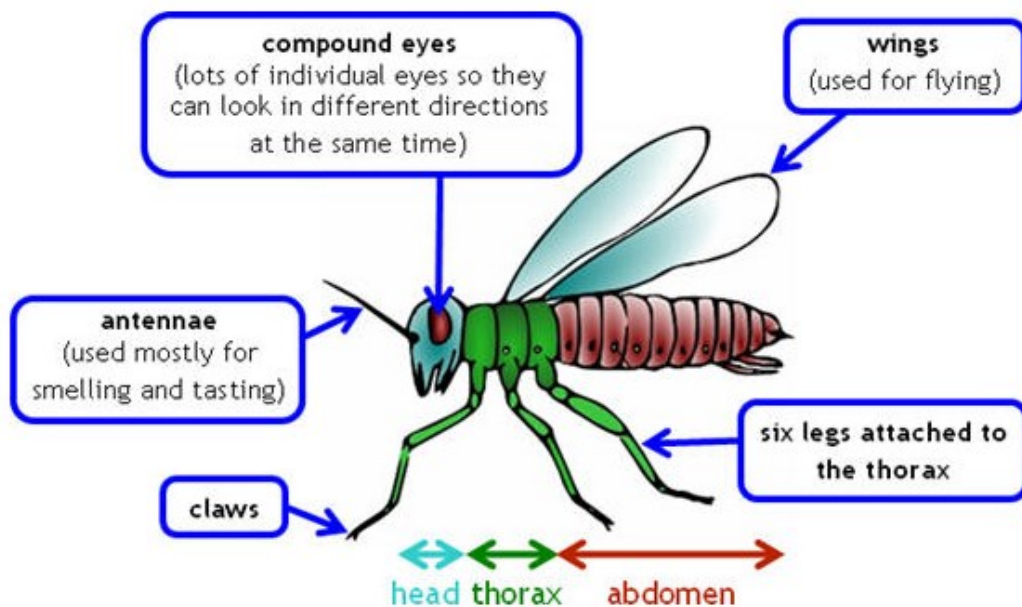


Image Source: www.biologyjunction.com

Grades: Pre-K & Kindergarten

Time Frame of Instruction: 40-45 minutes

<p><i>What Skill Are Being Taught?</i></p> <p>Through hands-on and listening activities, student should be able to:</p> <ul style="list-style-type: none"> • Identify common insects by sight and sound. • Recognize difference between an insect and other bugs such as spiders, centipedes, etc. - Differences should include but not limited to the number of body parts & legs (main way to distinguish between an insect, spider, etc.) 	<p>Educational Components of Classroom Project:</p> <ol style="list-style-type: none"> 1. Science: Students will learn the basics about insect biology and how to identify common “bugs” 2. Visual: Students will be able handle plastic bugs in order to see their similarities but also their differences 3. Listening: Students will listen to the recordings of sounds made by different insects and then match the insect that they hear to possible options on a worksheet 4. Arts: Students will have the opportunity to color pictures of different insects, create pom pom caterpillars/ants, and/or decorate insect collection jars.
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TIME	INSTRUCTIONAL SEQUENCE
5 mins	<p>Get started/Drill/Do Now: <i>(What meaningful activity will students complete as soon as they enter the classroom?)</i></p> <p>Have the classroom already set up in different stations. Allow students to observe and discuss what they see in front of them with their peers for a few minutes. Then ask the following question. After a several students have had an opportunity to give examples, explain to the students that they will have the opportunity to hear insect sounds, make/color insects, and learn more about what makes a bug an insect verses spider, etc.</p> <p>The following questions can be asked of the students:</p> <ol style="list-style-type: none"> 1. What do you see in front of you? 2. What is a bug? <ul style="list-style-type: none"> • Ask students to give examples of bugs; insect, spider, etc.

<p>5 mins</p>	<p>Whole Group Instruction Part 1: <i>(Focus lessons [explicit teaching/modeling, strategy demonstration shared reading, shared writing, discussion, writing process.]</i></p> <p>For the visual section, have student look at the bugs on their desks/pass the bugs around to their classmates. Once everyone has had a chance to see several different bugs the following questions can be asked:</p> <ul style="list-style-type: none"> • How many legs do <u> (fill in bug) </u> have? <ul style="list-style-type: none"> - Explain how insects have six (6) legs, spiders have eight (8) legs, etc. • How many body parts do <u> (fill in bug) </u> have? <ul style="list-style-type: none"> - Explain how insects have three (3) body parts; head, abdomen, & thorax, spiders have two (2) body parts; head fused to their thorax called a cephalothorax & abdomen, etc. • What differences do you see between the bugs in front of you? • What similarities do you see? • Do you know why some bugs have wings and others don't? • Have you seen any of these bugs before? • Where did you see them?
<p>10 mins</p>	<p>Whole Group Instruction Part 2: <i>(Focus lessons [explicit teaching/modeling, strategy demonstration shared reading, shared writing, discussion, writing process.]</i></p> <p>For the listening section, pass out the “Insect Sound Identification Worksheet” to students. Explain to the students that you will be playing the sounds of the four (4) different insects that are pictured on the worksheet and that they should place a 1, 2, 3, or 4 next to the insect/insect name that they think the sound matches. There is no specific order that you need to play the insect sounds in, however an answer key has been provided.</p> <p>Note: If order is changed from that on the provided answer key, a key should be made for easier grading/verification of answers</p> <p>Listening Activity References:</p> <ul style="list-style-type: none"> • Insect Sound Recordings: http://songsofinsects.com/ • Insects Pictured: Marsh Meadow Grasshopper, Spring & Fall Field Cricket, Nebraska Cone-head Katydid, and Scissor-grinder Cicada

<p>15-20 mins</p>	<p>Group Practice/Small Group Instruction: <i>(teacher-facilitated group discussion, collaboration, student conferencing, re-teaching or intervention, writing process)</i></p> <p>For this portion of the class, students will be given the opportunity to use their creative skills to decorate collection jars, color pictures of different insects, and/or make pom pom caterpillars and bugs.</p> <p>Collection Containers:</p> <ul style="list-style-type: none"> • Example included in kit • Prior to the class, punch holes in the lids of each container with a sharp object such as a nail or thumb tack • Pass out jars or other small containers with lids to each student. Allow them to decorate the jars/containers with stickers, puffy paint, etc. • Explain to the students that they will take their containers home at the end of the day and that they should try to catch bugs to bring back to class for show and tell <p>Coloring Pages:</p> <ul style="list-style-type: none"> • You can either make copies of the sample pages that are included in the kit or print off different pictures, but a variety should be provided for students to choose from • Let students choose which bug they would like to color • Encourage students to be creative <p>Pom Pom Caterpillars/Bugs:</p> <ul style="list-style-type: none"> • Have student glue pom poms together to create caterpillars and bugs (Samples Provided) • Remind students that insects have three (3) body parts and six (6) legs and spiders have two (2) body parts and eight (8) legs • Encourage students to be creative
<p>5 mins</p>	<p>Evaluate Understanding/Assessment: <i>(How will I know if students have achieved the project's objective?)</i></p> <p>At the end of the class period, ask student if they have any questions about what they have done, seen, learned.</p> <p>Encourage students to take home any unfinished projects and finish them as well as collect bugs in their jars to bring back to class for show and tell.</p>

<p>5-10 mins</p>	<p>Closing Activities/Summary: <i>(How will I tie up loose ends, reinforce/revisit the objective and connect the lesson to the unit?)</i></p> <p>When students bring insects back to class in their collection jars have them share with the class:</p> <ul style="list-style-type: none"> • What type of insect/bug, if they know • Where they caught the insect/bug • Why they caught the insect/bug • If the insect/bug has done anything interesting since being caught
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Resources/Instructional Materials Needed: *(What do I need to teach the lesson?)*

Visual Lesson Bugs:

- Plastic Bugs included in kit, purchased from Oriental Trading Company

Insect Sound/Listening Exercise:

- Sample Worksheet & Answer Key included in the kit
- The Song of Insects. (2019). Songs of Insects A Guide to the Voices of Crickets, Katydid & Cicadas. Retrieved April 30, 2019, from <http://songsofinsects.com/>
- Additional websites that can be used that have insect sounds:
 - Mankin, R. (2005, October 24). Bug Bytes. Retrieved April 30, 2019, from <https://www.ars.usda.gov/ARSEUserFiles/3559/soundlibrary.html>
 - Smithsonian Institution. (2019). Sounds of Insects. Retrieved April 30, 2019, from <https://folkways.si.edu/sounds-of-insects/album/smithsonian>

Insect Coloring Page:

- 2016ColoringStar.com. (2016). Bug coloring pages grasshopper. Retrieved May 4, 2019, from <http://coloringstar.com/best-bug-coloring-pages-grasshopper-7721/>
- Coloring Page Book. (n.d.). Free Butterfly Coloring Page. Retrieved May 4, 2019, from <https://www.coloringpagebook.com/free-butterfly-coloring-page/>
- TheColor.com. (2019). Beetle Coloring Page | Free Beetle Online Coloring. Retrieved May 4, 2019, from <https://www.thecolor.com/Coloring/Beetle.aspx>
- The Little Ladybird. (2016). LADYBUG COLORING PAGE. Retrieved May 4, 2019, from http://thelittleladybird.com/?p=Ladybirds__LadyBug__6
- Additional Insect Coloring Pages:
 - Mediavine Home. (2019, May 03). Little Bugs Coloring Pages for Kids. Retrieved May 4, 2019, from <https://www.easypeasyandfun.com/bugs-coloring-pages/>

Pom Pom Caterpillar/Bug Supplies:

- Pom poms: Can be purchased from a craft store, Walmart, Dollar Store
- Popsicle Sticks: Can be purchased from a craft store, Walmart, Dollar Store
- Googly Eyes: Can be purchased from a craft store, Walmart, Dollar Store
- Pipe Cleaners: Can be purchased from a craft store, Walmart, Dollar Store
- Glue/Glue Sticks: Can be purchased from a craft store, Walmart, Dollar Store

Collection Jars Supplies:

- Jars: Can be purchased from Dollar Store or Oriental Trading Company
- Stickers: Purchased from Hobby Lobby
- Puffy paint or other decorations can be purchased if desired from any craft store, Walmart, etc.

Name _____

Insect Sound Identification Worksheet

As each sound is played, place a 1, 2, 3, or 4 next to the insect that the sound belongs to.



Grasshopper _____



Cricket _____



Katydid _____



Cicada _____

ANSWER KEY

Insect Sound Identification Worksheet

As each sound is played, place a 1, 2, 3, or 4 next to the insect that the sound belongs to.



Grasshopper 4



Cricket 3



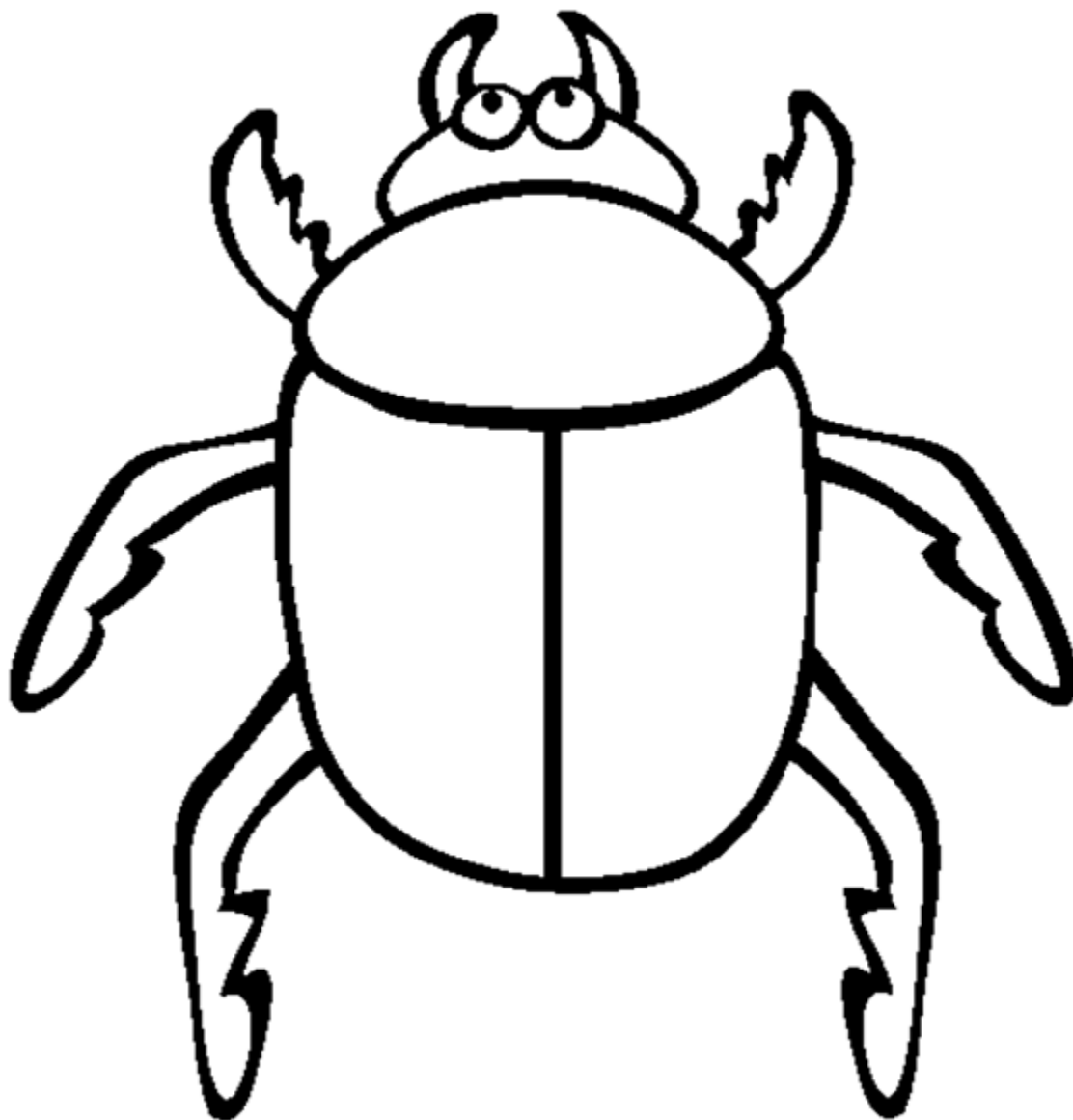
Katydid 2



Cicada 1

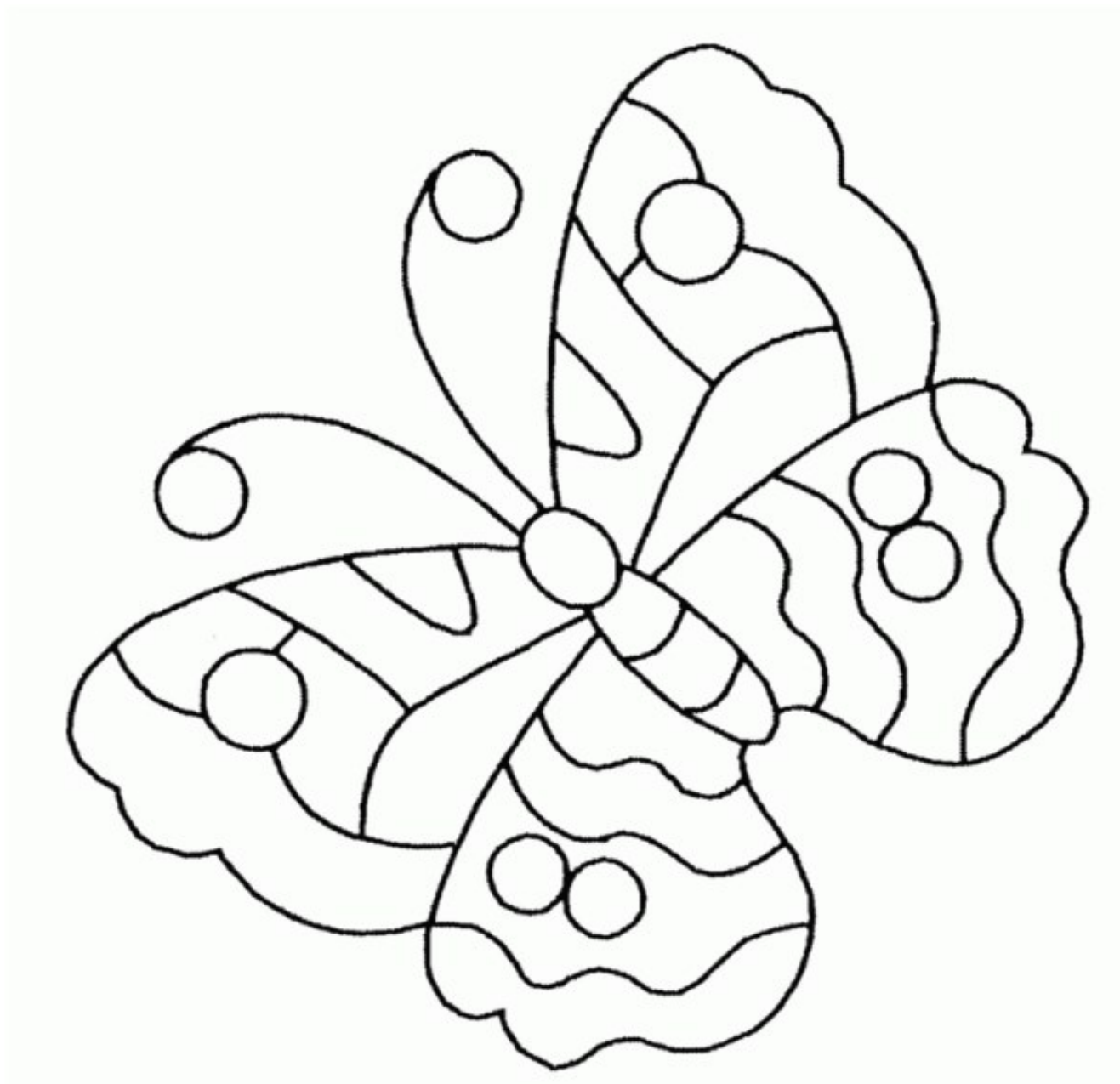
Name _____

Beetle



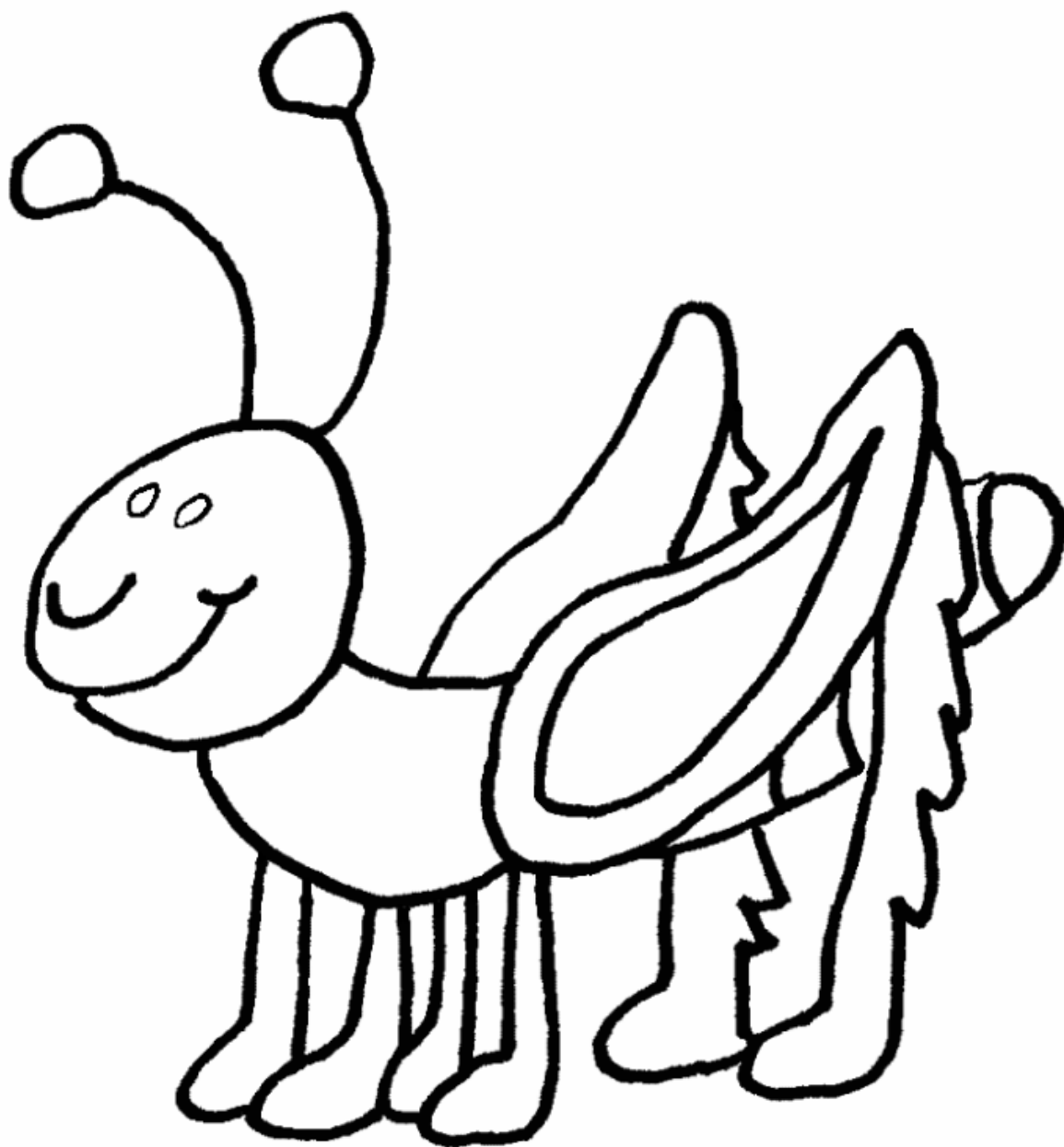
Name _____

Butterfly



Name _____

Grasshopper



Name _____

Ladybug

